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10/766,972

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Edward A. Hubbard

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MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 S. WACKER DRIVE
32ND FLOOR
CHICAGO, IL 60606

EXAMINER

COX, NATISHA D

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/766,972 | Applicant(s) HUBBARD ET AL. | |
| | Examiner NATISHA COX | Art Unit 2448 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/04/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is responsive to the preliminary amendment of application 10/766972 filed on 01/29/04.

Claims 1- 17 have been canceled.

New claims 18- 53 have been added.

Claims 18- 53 are pending.

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not disclose the "computer program product operating within a Server system" as claimed. The specification does not show how the "computer program product operating within a Server system" can perform the modules claimed.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 42- 53 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are not limited to tangible embodiments since they do not claim physical articles or objects as part of the claims to establish a statutory category as a machine or manufacture, and they are clearly not directed to a process or composition of matter. As claimed, a "computer program product" fails to fall within a statutory category of invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18- 21, 24- 33, 36- 45 and 48- 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft et al (US Patent No. 6,112,225 referred herein after as Kraft) and further in view of Armentrout et al (US Patent No 6,463,457 referred herein after as Armentrout).

***As per claim 18, Kraft discloses a method of operating a distributed processing system to provide data conversion services, comprising:
coupling a server system (coordinating computer 102) to a network (network 104)***

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(Kraft, col. 4 lines 7- 10), **the network (104) configured to enable the server system (102) to be coupled to M distributed devices** (multiple peripheral computers 106) (Kraft, col. 4 lines 7- 10), **wherein the M distributed devices perform workloads for the distributed processing system** (Kraft, col. 4 lines 11- 12); **receiving in the server system a request** (Kraft, col. 6 line 67- col. 7 line 1) **thereby generating workload** (Kraft, col. 7 lines 5- 8); **partitioning the data conversion workload into N partitioned data conversion workloads** (Kraft, col.7 line 9- 10), **wherein N is less than or equal to M** (Kraft, col. 7 lines 5- 8; simultaneously); **and utilizing the server system to distribute the N partitioned data conversion workloads to N distributed devices selected from the M distributed devices to complete a data conversion of the data set** (Kraft, col. 7 lines 29- 31).

Kraft does not disclose data conversion.

However, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include data conversion as a task to be distributed because one of ordinary skill in the art would have been motivated to efficiently complete the conversion of data by spreading the conversion among multiple computers.

Kraft does not disclose a request from a requesting device.

However, Armentrout discloses a request from a requesting device (Armentrout, col. 2 line 41- 42; col. 3 line 2- 4).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of receiving a request

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from a requesting device into Kraft's teaching of task distribution because on of the ordinary skill in the art would have been motivated to receive task request from any client device.

As per claim 19, claim 18 is incorporated and Kraft further discloses comprising sending a software agent to each of the N distributed devices for performing the data conversion of one of the N partitioned data workloads (Kraft, col. 8 lines 15- 16).

As per claim 20, claim 18 is incorporated and Kraft further discloses receiving by the server system N completed data conversion results from the N distributed devices (Kraft, col. 7 line 57- 58); ***and assembling the N completed data conversion results thereby generating a converted data set corresponding to the data set*** (Kraft, col. 7 line 59- 61).

As per claim 21, claim 20 is incorporated and Kraft does not discloses sending the converted data set to the requesting device.

However, Armentrout discloses sending the converted data set to the requesting device (Armentrout, col. 5 lines 19- 21).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of sending the converted data set to the requesting device into Kraft's teaching of task distribution

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because on of the ordinary skill in the art would have been motivated to return results to the client that requested the service.

As per claim 24, claim 18 is incorporated and Kraft does not disclose wherein each of the N distributed devices receiving one of the N partitioned data conversion workloads communicates a completed data conversion result directly to the requesting device.

However, Armentrout discloses wherein each of the N distributed devices receiving one of the N partitioned data conversion workloads communicates a completed data conversion result directly to the requesting device (Armentrout, col. 2 lines 34- 36).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of sending the converted data set to the requesting device into Kraft's teaching of task distribution because on of the ordinary skill in the art would have been motivated to return results to the client that requested the service.

As per claim 25, claim 24 is incorporated and Kraft further discloses wherein the requesting device receiving the results of the N partitioned data conversion workloads assembles the results into a converted data set corresponding to the data set (Kraft, col. 7 lines 57- 61).

As per claim 26, claim 18 is incorporated and Kraft does not disclose wherein the N distributed devices are allocated to perform data conversion of data sets for requesting devices as with priority over other processing the N distributed devices may perform for the distributed processing system.

However, Armentrout discloses wherein the N distributed devices are allocated to perform data conversion of data sets for requesting devices as with priority over other processing the N distributed devices may perform for the distributed processing system (Armentrout, col. 5 line 49- 50, col. 11 lines 36- 40).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of priority into Kraft's teaching of task distribution because one of the ordinary skill in the art would have been motivated to provide control of the execution of task.

As per claim 27, claim 18 is incorporated and Kraft does not disclose wherein M and N may be dynamically increased by the server system in response to a priority request from the requesting device to complete a data conversion of a data set in a specified time period.

However, Armentrout discloses wherein M and N may be dynamically increased by the server system in response to a priority request from the requesting device to complete a data conversion of a data set in a specified time period (Armentrout, col. 2 lines 55- 58).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of increasing resources into Kraft's teaching of task distribution because one of the ordinary skill in the art would have been motivated to increase resources as traffic and clients increase.

As per claim 28, claim 18 is incorporated and Kraft does not disclose wherein sizes of the N partitioned workloads are determined by the server system based on workload capability factors of the N distributed devices.

However, Armentrout discloses wherein sizes of the N partitioned workloads are determined by the server system based on workload capability factors of the N distributed devices (Armentrout, col. 3 lines 6- 12).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of task allocation into Kraft's teaching of task distribution because one of the ordinary skill in the art would have been motivated to match computer capability with tasks requirements and allocate task the appropriate amount of available power.

As per claim 29, claim 28 is incorporated and Kraft does not disclose wherein the N partitioned workloads are allocated to the N distributed devices on a size basis wherein ones larger of the N partitioned workloads are allocated to corresponding ones of the N distributed devices with larger workload capability factors (Armentrout, col. 11 lines 29- 31).

However, Armentrout discloses wherein the N partitioned workloads are allocated to the N distributed devices on a size basis wherein ones larger of the N partitioned workloads are allocated to corresponding ones of the N distributed devices with larger workload capability factors (Armentrout, col. 11 lines 29- 31).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of task allocation into Kraft's teaching of task distribution because one of the ordinary skill in the art would have been motivated to match computer capability with tasks requirements and allocate task the appropriate amount of available power.

As per claims 30- 33 and 36- 41, they are the system claims, corresponding to and does not teach or define any new limitations, above claims 18- 21, and 24- 29. Therefore, claims 30- 33 and 36- 41, are rejected under the same reason set forth in connection with the rejection of claims 18- 21 and 24- 29 above.

As per claim 42, Kraft discloses a computer program product operating within a server (Kraft, Fig. 2) ***managing a distributed processing system*** (Kraft, col. 4 line 4– 9) ***for providing data conversion services*** (Kraft, col. 2 lines 45- 48; where the sub divisible processing task is the “data conversion service” as claimed), ***wherein the server system is coupled to a network*** (Kraft, col. 4 lines 7- 9), ***the network configured to enable the server system to be coupled to M distributed devices*** (Kraft, col. 4 lines 7- 9), ***wherein the M distributed devices perform workloads for***

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the distributed processing system (Kraft, col. 4 lines 11- 12), ***the program product comprising a program of instructions for performing the program steps of*** (Kraft, col. 2 lines 53- 56): ***providing an incentive for M distributed devices to perform workloads for the distributed processing system*** (Kraft, col. 3 lines 14- 16); ***receiving in the server system a request thereby generating a workload*** (Kraft, col. 6 lines 67- col. 7 line 1); ***partitioning the data conversion workload into N partitioned data conversion workloads*** (Kraft, col. 7 lines 9- 10), ***wherein N is less than or equal to M*** (Kraft, col. 7 lines 5- 8); ***and distributing the N partitioned data conversion workloads to N distributed devices selected from the M distributed devices to complete a data conversion of the data set*** (Kraft, col. 7 lines 29- 31).

Kraft does not disclose data conversion.

However, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include data conversion as a task to be distributed because one of ordinary skill in the art would have been motivated to efficiently complete the conversion of data by spreading the conversion among multiple computers.

Kraft does not disclose a request from a requesting device.

However, Armentrout discloses a request from a requesting device
(Armentrout, col. 2 line 41- 42; col. 3 line 2- 4).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Armentrout's teaching of receiving a request from a requesting device into Kraft's teaching of task distribution because on of the

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ordinary skill in the art would have been motivated to receive task request from any client device.

As per claims 43-45 and 48- 53, they are the computer program product claims, corresponding to and does not teach or define any new limitations, above claims 19- 21, and 24- 29. Therefore, claims 43- 45 and 48- 53, are rejected under the same reason set forth in connection with the rejection of claims 19- 21 and 24- 29 above.

3. Claims 22, 23, 34, 35, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraft and Armentrout and further in view of Britt (US Patent No. 6,742,038 referred herein after as Britt).

As per claim 22, claim 18 is incorporated and Kraft nor Armentrout discloses wherein the requesting device is a wireless device and the data conversion of the data set reformats a content of a network site generating a reformatted content so that the reformatted content conforms to a protocol of the wireless device .

However, Britt discloses wherein the requesting device is a wireless device (Britt, col. 1 lines 63- 64) and the data conversion of the data set reformats a

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content of a network site generating a reformatted content so that the reformatted content conforms to a protocol of the wireless device (Britt, col. 5 lines 45- 46).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Britt's teaching of access to a server by a wireless device into Kraft and Armentrout's teaching because on of the ordinary skill in the art would have been motivated to communicate data to a wireless device.

As per claim 23, claim 18 is incorporated and Kraft nor Armentrout discloses wherein the requesting device is a wireless device server that first receives a request for a content from the network site from a content user wireless device.

However, Britt discloses wherein the requesting device is a wireless device server that first receives a request for a content from the network site from a content user wireless device (Britt, col. 5 lines 48- 50).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate Britt's teaching of access to a server by a wireless device into Kraft and Armentrout's teaching because on of the ordinary skill in the art would have been motivated to communicate data to a wireless device.

As per claims 34 and 35, they are the system claims, corresponding to and does not teach or define any new limitations, above claims 22 and 23. Therefore, claims 34 and 35 are rejected under the same reason set forth in connection with the rejection

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of claims 22 and 23 above.

As per claims 46 and 47, they are the computer program product claims, corresponding to and does not teach or define any new limitations, above claims 22 and 23. Therefore, claims 46 and 47, are rejected under the same reason set forth in connection with the rejection of claims 22 and 23 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natisha Cox whose telephone number is (571)270-7167. The examiner can normally be reached on Monday to Thursday and every other Friday, 6:30am - 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Natisha Cox

Patent Examiner
Art Unit 4141
Date:

/Philip C Lee/
Primary Examiner, Art Unit 2452